User Guide

Nytro™ XM vCenter Plug-In Rev 1.0.0

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Revision History

Version and Date	Description of Changes
Version 1.0, December 2014	First release of the document.

Electromagnetic Compatibility Notices

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
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Chapter 1: Nytro XM vCenter Plug-In Overview

The Nytro™ XM vCenter plug-in enables you to manage the Seagate® controllers in the vSphere® environment to provide all of the major system integrators or OEMs with a single window to manage the Seagate controllers in the VMware® ESXi operating system. The plug-in coexists with the VMware ecosystem to provide seamless control over the Seagate controllers.

The Nytro XM vCenter plug-in includes the Nytro XM plug-in and Nytro XM Event Monitoring Service (EMS) plug-in, hereon called Nytro XM EMS plug-in.

- The Nytro XM plug-in enables you to create basic configuration, rename the virtual drive (VD), and monitor the health status of the controllers. The plug-in leverages the core vCenter server capabilities, such as authentication. The plug-in includes storage monitoring, hardware status, management and monitoring of physical and virtual resources, and alert notifications. The Nytro XM plug-in empowers you to effectively manage your storage resources, that is, your physical and virtual storage infrastructure through a vSphere web client.
  See Chapter 3, Using the Nytro XM Plug-In.
- The Nytro XM EMS plug-in enables you to view all of the controller events occurring at the vCenter level in a single common event console. You can monitor the connected controllers by using the events generated on the controllers. See Chapter 4, Using the Nytro XM Event Monitoring Service Plug-In.

You can use the Nytro XM vCenter plug-in without any additional hardware resources.

1.1 Supported Controllers

- Nytro XP 6209
- Nytro XP 6210
- Nytro XP730X
- WDELP4X100
- WDELP4X200
- NWD-BLP4-1365
- NWD-RLP4-1860
- NWD-6210-4A2048
- MLSI800M
- MLSI400S
- NWD-BLP3-300
- NWD-WLP3-300
- NWD-BLP3-600
- NWD-BLP4-800
- NWD-WLP4-200
- NWD-WLP4-400
- NWD-BLP4-400
- NWD-BLP4-800
- NWD-BLP4-1600
- NXD-BLP4-400
- NXD-BLP4-800
- NWD-BFH8-3200
- NWD-6209-4A1024
- NWD-BFH6-1200

- NWD-BFH8-1600
- NXD-BLP4-1600
- NWD-6210-4A2048

1.2 Supported Operations

The Nytro XM vCenter plug-in supports the operations provided in the following table.

Operation Supported	Nytro WarpDrive	Nytro XP64xx\73xx
Create or Delete virtual drive (VD)	Not supported	Supported
Format controller	Supported	Not supported
Format SSD	Supported (if there are no VDs)	Not supported
Erase physical drive (PD)	Not supported	Supported
Clear configuration	Not supported	Supported
VD rename	Not supported	Supported
Event Monitoring	Supported	Supported

Chapter 2: Installing and Registering the Nytro XM vCenter Plug-In

This chapter provides you the steps to install and register the Nytro XM vCenter plug-in. The Nytro XM vCenter plug-in installation includes the installation of Nytro XM plug-in and Nytro XM EMS plug-in into the vSphere environment.

2.1 Hardware and Software Requirements

The Nytro XM vCenter plug-in is supported on the following hardware and software components.

2.1.1 Supported Platforms

- vCenter Server 5.5
- vSphere web client 5.5
- ESXi 5.5

NOTE Refer to your vCenter server documentation and to the operating system documentation for more information.

2.2 Prerequisites to Use the Nytro XM vCenter Plug-In

- Seagate provided CIM provider (included in the release package; the Nytro XM vCenter plug-in works with version 80.101.V0.08) installed on the ESXi host
- vCenter Server 5.5
  Visit: http://www.vmwarelearning.com/NtB/installing-vmware-vcenter-server/

NOTE vCenter installation must have the Single sign-on, inventory service modules, and vSphere Web Client installed
(visit:
https://www.vmware.com/support/pubs/vsphere-esxi-vcenter-server-pubs.html).

- vSphere web client 5.5
- Nytro XM plug-in
- Nytro XM EMS plug-in (included in the release package)
- ESXi host version 5.5 with the Seagate controllers attached
- ESXi host must be configured as a part of a domain.

2.3 Deploying the Nytro XM vCenter Plug-In

You can deploy the Nytro XM vCenter plug-in by performing one of the two methods: installing or registering the Nytro XM plug-in and Nytro XM EMS plug-in as mentioned in this chapter.

2.4 Installing the Nytro XM Plug-In

To install the Nytro XM plug-in, perform the following steps:

1. Extract the contents of the `nytro-xm.zip` into the `nytro-xm` folder.

NOTE Make sure that the plug-in contents are in the same path as mentioned under the `nytro-xm.zip` folder structure, that is, the plug-in contents must not be in any intermediate folder.

2. Stop the vSphere web client service.
3. Copy the `nytro-xm` folder into the following locations based on the operating systems used.

On the Windows server

— `..\Program Files\VMware\Infrastructure\vSphereWebClient\plugin-packages`

On the Linux server

— `/usr/lib/vmware-vsphere-client/plugin-packages`

4. Start the vSphere web client service.
5. Log on to vSphere Web Client.
6. To use the Nytro XM plug-in, navigate to the **vCenter->Host->Manage** tab, and click the **Nytro XM** tab.

2.5 Registering the Nytro XM Plug-In

To register the Nytro XM plug-in, perform the following steps:

1. Pick up the respective `zip` file, `nytro-xm.zip` bundled within the release package.
2. Host the `nytro-xm.zip` on an HTTP location.
3. To ensure that the HTTP location is working correctly, type the URL, for example, `http://<Webserver IP>:Port/nytro-xm.zip` in a browser, and press **Enter**.

   Downloading starts.
4. In the `PluginExtension.xml XML` file, change the package location URL (zip file downloadable HTTP location) with the HTTP path provided in Step 2, and then save the `XML` file on the machine where you have the vSphere Client 5.5 installed.

NOTE vSphere Client 5.5 is a prerequisite to register the Nytro XM plug-in.

5. Modify the web client properties file, `webclient` under `C:\ProgramData\VMware\vSphere Web Client` on the vCenter machine to add a new line as shown in the following example:

   ```
   allowHttp=true
   ```
6. Run vSphere client and connect it to the vCenter server.
7. Go to `Plug-ins->Manage Plugins`.

   The **Plug-in Manager** dialog appears.

8. Right-click the blank space in the dialog, and select **New Plug-in**.
   The **Register Plug-in** dialog appears.
9. Click the **Browse** button, and select the path to the `PluginExtension.xml` file as provided in Step 3 in Section 2.4, Installing the Nytro XM Plug-In.
10. Click **Register Plug-in**.
11. Open a new web client session to the vCenter, and click the **Nytro XM** tab under **Manage**.
    This action triggers the deployment of the plug-in on the web client host.

2.6 Enabling the Nytro XM Plug-In

You can access the Nytro XM plug-in interface in a separate tab when an ESXi host is selected.

To enable the Nytro XM plug-in, perform the following steps:

1. From the Applications menu, select `System Administration > Plug-in Management`.
2. Right-click the **Nytro XM Plug-in**, and select `Other > Enable`, from the **Context** menu.
3. Click **Yes**.

NOTE By default, the plug-ins are enabled.

2.7 Disabling the Nytro XM Plug-In

You can disable the Nytro XM plug-in. The plug-in remains installed, but will be inoperative.
You can re-enable the plug-in anytime later.

1. From the **Applications** menu, select `System Administration > Plug-in Management`.
2. Right-click **Nytro XM Plug-in**, and select `Other > Disable` from the context menu.
3. Click **Yes**.
4. Click **Yes** on the **Reload vSphere Web Client** dialog that appears.

2.8 Unregistering the Nytro XM Plug-In

You can unregister the Nytro XM plug-in that you had previously registered with the vCenter server. You can manually delete the extension (for more information, look up for com.Seagate.vCenter Plugin.NitroXM) by using the vCenter Managed Object Browser (MOB) interface in your Web browser (refer to the vCenter documentation for the MOB interface usage).

Unregistering a Nytro XM plug-in package on the vCenter server does not delete the Nytro XM plug-in package files that are installed locally on the vSphere Web Client Virgo server. The files are not used after you unregister the package. To remove the files for clean-up purposes, you must delete the Nytro XM plug-in package files manually.

2.9 Installing the Nytro XM EMS Plug-In

To install the Nytro XM EMS plug-in, perform the following steps:

1. Extract the contents of the `nytro-xm-ems.zip` into the `nytro-xm-ems` folder.

NOTE Make sure that the plug-in contents are in the same path as mentioned under the `nytro-xm-ems.zip` folder structure, that is, the plug-in contents must not be in any intermediate folder.

2. Stop the vSphere web client service.
3. Copy the `nytro-xm-ems` folder into the following locations based on the operating systems used.

On the Windows server

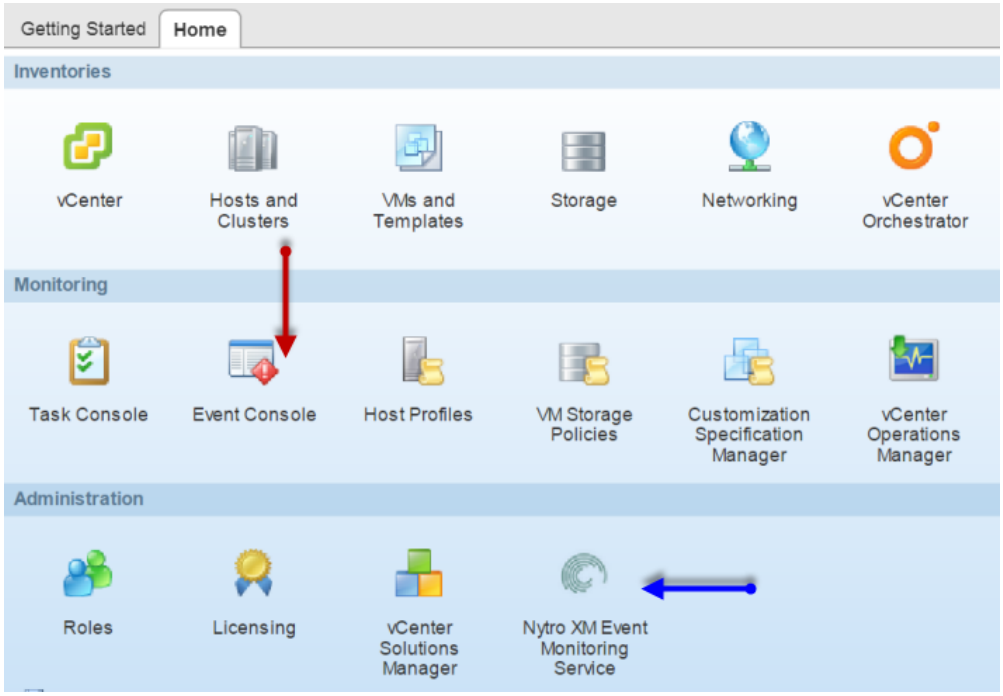
— `..\Program Files\VMware\Infrastructure\vSphereWebClient\plugin-packages`

On the Linux server

— `/usr/lib/vmware-vsphere-client/plugin-packages`

4. Start the vSphere web client service.
5. Log on to vSphere Web Client.
6. To use the Nytro XM EMS plug-in, click the home ( ) icon on the top of the window.
   The following window appears.

Figure 1 Nytro XM EMS Home Page



2.10 Registering the Nytro XM EMS Plug-In

To register the Nytro XM EMS plug-in, perform the following steps:

1. Pick up the respective `zip` file, `nytro-xm-ems.zip` bundled within the release package.
2. Host the `nytro-xm-ems.zip` on an HTTP location.
3. To ensure that the HTTP location is working correctly, type the URL, for example, `http://<Webserver IP>:Port/nytro-xm-ems.zip` in a browser, and press **Enter**.

   Downloading starts.
4. In the `PluginExtension.xml XML` file, change the package location URL (zip file downloadable HTTP location) with the HTTP path provided in Step 2, and then save the `XML` file on the machine where you have the vSphere Client 5.5 installed.

NOTE vSphere Client 5.5 is a pre-requisite to register the Nytro XM EMS plug-in.

5. Modify the web client properties file, `webclient` under `C:\ProgramData\VMware\vSphere Web Client` on the vCenter machine to add a new line as shown in the following example:

   ```
   allowHttp=true
   ```
6. Run vSphere client and connect it to the vCenter server.
7. Go to `Plug-ins->Manage Plugins`.

   The **Plug-in Manager** dialog appears.
8. Right-click the blank space in the dialog, and select **New Plug-in**.

   The **Register Plug-in** dialog appears.
9. Click the **Browse** button, and select the path to the `PluginExtension.xml` file as provided in Step 3 in Section 2.9, Installing the Nytro XM EMS Plug-In.
10. Click **Register Plug-in**.
11. Open a new web client session to the vCenter, and click the **Nytro XM EMS** tab under **Manage**.

    This action triggers the deployment of the plug-in on the web client host.

2.11 Enabling the Nytro XM EMS Plug-In

You can access the Nytro XM EMS plug-in interfaces in a separate tab when an ESXi host is selected.

To enable the Nytro XM EMS plug-in, perform the following steps:

1. From the Applications menu, select `System Administration > Plug-in Management`.
2. Right-click the **Nytro XM EMS** plug-in, and select `Other > Enable`, from the **Context** menu.
3. Click **Yes**.

NOTE By default, the plug-in is enabled.

2.12 Disabling the Nytro XM EMS Plug-In

You can disable the Nytro XM EMS plug-in. The plug-in remains installed, but will be inoperative. You can re-enable the plug-in anytime later.

1. From the **Applications** menu, select `System Administration > Plug-in Management`.
2. Right-click **Nytro XM EMS Plug-in**, and select `Other > Disable` from the context menu.
3. Click **Yes**.
4. Click **Yes** on the **Reload vSphere Web Client** dialog that appears.

2.13 Unregistering the Nytro XM EMS Plug-In

You can unregister the Nytro XM EMS plug-in that you had previously registered with the vCenter server. You can manually delete the extension (for more information, look up for com.Seagate.vCenterPlugin.nytro-xm-ems) by using the vCenter Managed Object Browser (MOB) interface in your Web browser (refer to the vCenter documentation for the MOB interface usage).

Unregistering a Nytro XM EMS plug-in package on the vCenter server does not delete the Nytro XM EMS plug-in package files that are installed locally on the vSphere Web Client Virgo server. The files are not used after you unregister the package. To remove the files for clean-up purposes, you must delete the Nytro XM EMS plug-in package files manually.

Chapter 3: Using the Nytro XM Plug-In

This chapter helps you configure/setup the Nytro XM plug-in, and perform all of the controller-related operations.

The plug in enables you to perform the following operations:

- Viewing the health and status of the controllers.
- Viewing the information of the events generated.
- Issuing management and administration commands to the VDs.
- Creating, configuring, or deleting VDs.
- Discovering the controllers, physical disk, virtual drive and viewing the controller properties.

3.1 Logging On to the VMware vSphere Web Client

Log on to the **vmware vSphere Web Client** interface with your user credentials.

After you log on to the VMware vSphere® Web Client, go to the Nytro XM plug-in environment to perform the Nytro controller-related operations.

3.2 Navigating to the Nytro XM Plug-In environment

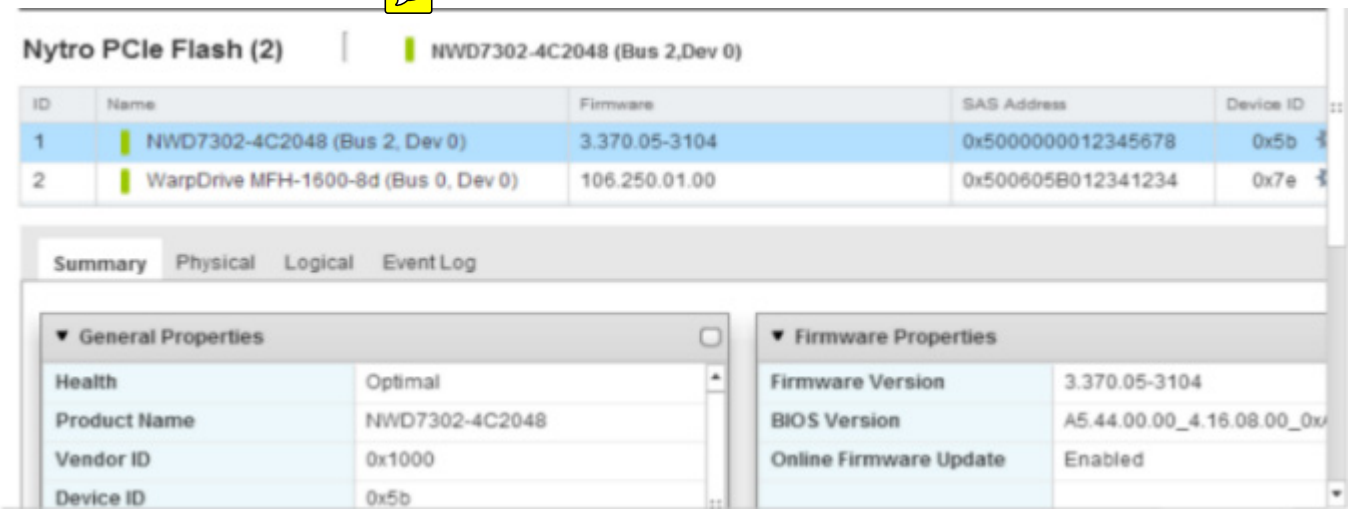
To navigate to a Nytro vCenter Core plug-in, perform the following steps:

1. Click the icon on the **vmware vSphere Web Client** window or click

on the left pane of the VMware vSphere Web Client window.
2. In the vCenter Home tree, expand **Inventory Lists**, and click **Hosts**.
   The **Hosts** window appears on the right pane.
3. Select the host where the Seagate controllers are attached and can be viewed or managed.
4. Under the host view, select the **Manage** tab to view the plug-in-specific **Nytro XM** tab.

The **Nytro XM Plug-In** main window appears.

Figure 2 Nytro XM Main Window

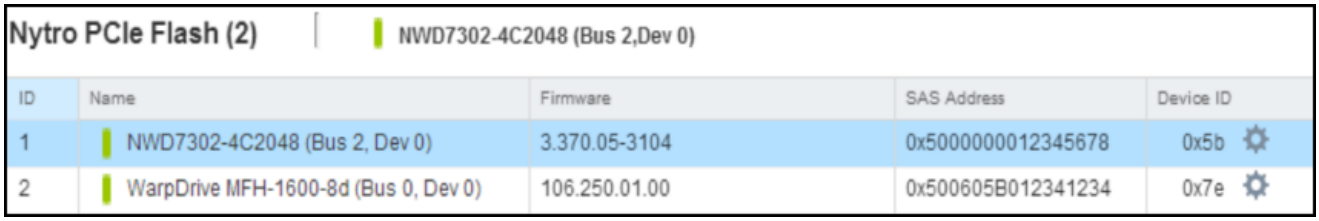


3.2.1 Controller Grid

The Grid view shows an overview of the system and shows the controller name, controller firmware version, the SAS address of the controller, and device ID. After you log onto the vCenter server, in the **Managed Hosts** page, select any controllers as shown in the following figure.

The selected controller is highlighted.

Figure 3 Controller Grid



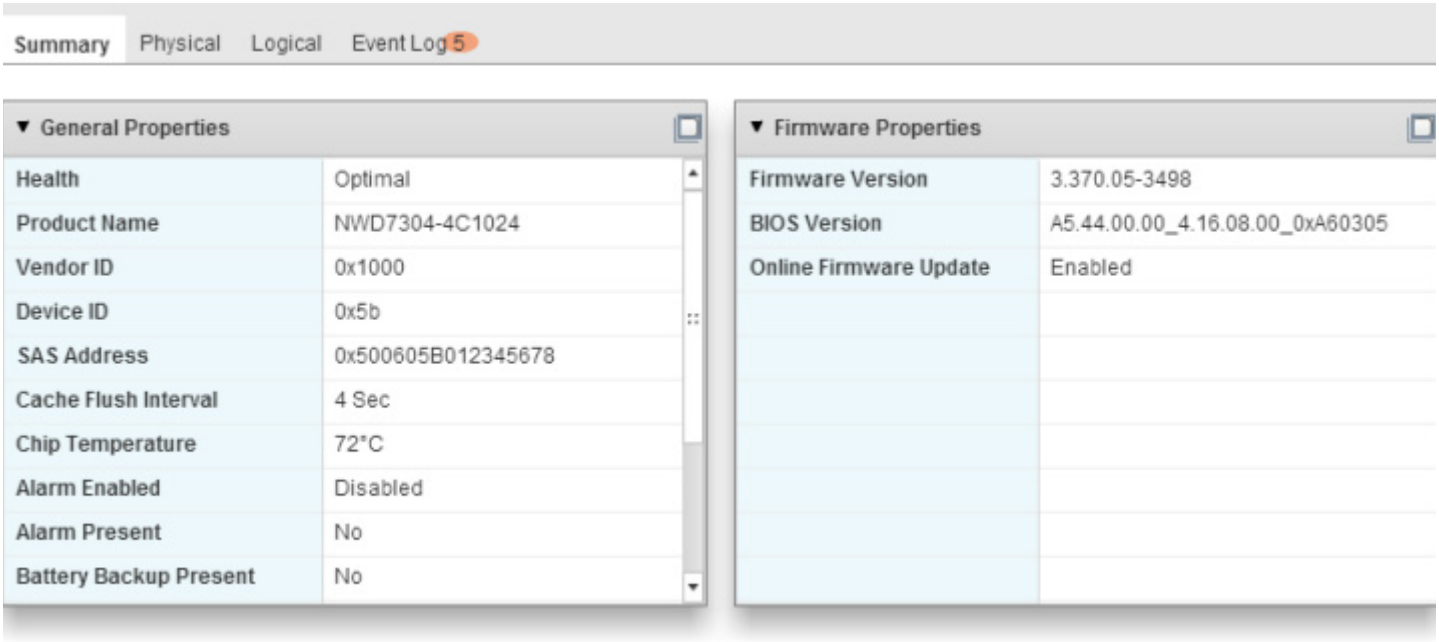
The following table shows the GUI icons that appear in the Nytro XM plug-in application.

Icons	Description
	Alarm to indicate the critical status.
	Alarm to indicate the warning status.
LED status of the controller.	
	Indicates that the controller temperature is critical ( ).
	Indicates normal temperature.

3.2.2 Controller Summary View

The summary view is the default window. This view shows the information about the selected controller. The information on this dialog is read-only and cannot be modified directly. The available operations on the Nytro XM plug-in are, viewing the controller properties, drive properties, VD properties, health information, and other information.

Figure 4 Nytro XM Plug-in Summary View

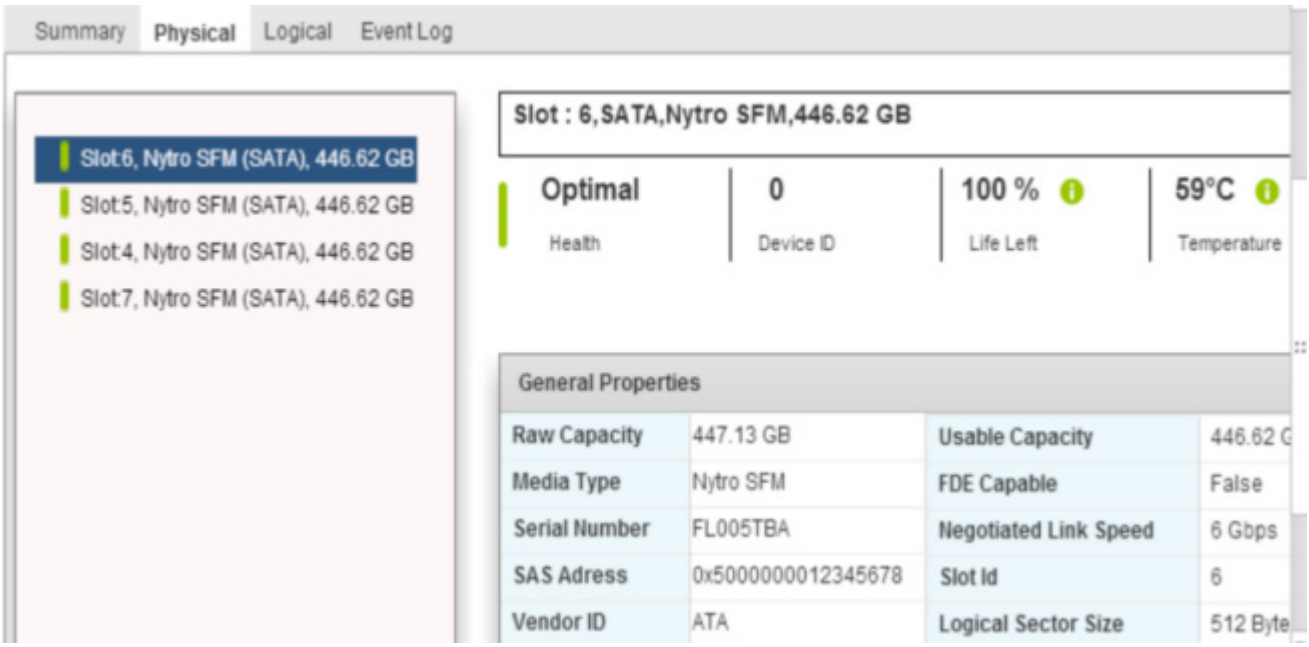


Property	Description
General Properties	
Health	Shows the controller health.
Product Name	Shows the name of the controller.
Vendor ID	Shows the vendor ID.
Device ID	Shows the device ID.
SAS Address	Shows the SAS address for the drive.
Cache Flush Interval	The interval (in seconds) at which the contents of the on-board data cache are flushed. The default is 4 seconds.
Chip Temperature	Shows the controller temperature; based upon this value, the controller functionality can be monitored and managed.
Alarm Enabled	Indicates if the controller alarm is enabled.
Alarm Present	Indicates if the alarm is present in the controller.
Battery Backup Present	Indicates if the battery backup unit is present.
Firmware Properties	
Firmware Version	Shows the controller firmware version supported.
BIOS Version	Shows the server BIOS version supported.
Online Firmware Upgrade	Shows if the online firmware upgrade operation is enabled.

3.2.3 Controller Physical View

The Physical view shows the hierarchy of physical devices that are a part of the controller.

Figure 5 Controller Physical View



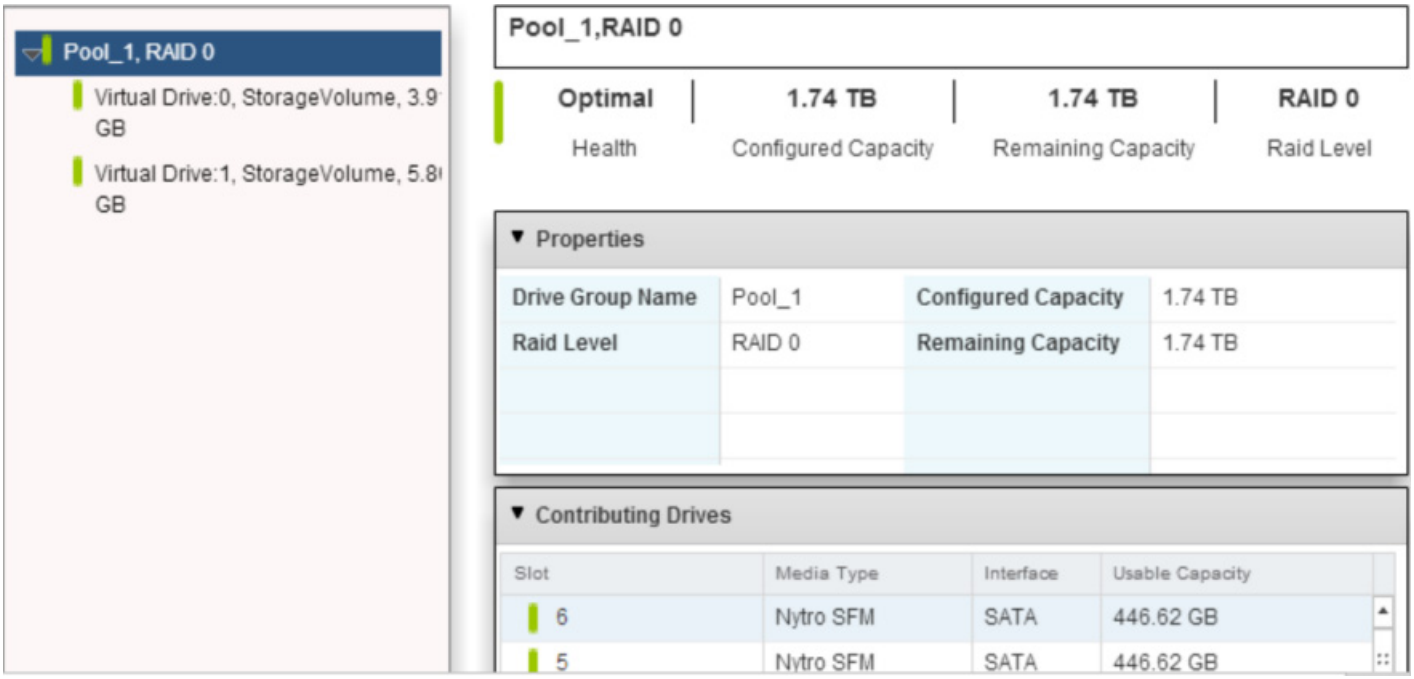
Property	Description
Health	The drive health information.
Device ID	Shows the drive ID. Each of the drive has a unique ID.
Life Left	SSD Life Left values (based on the Nytro controller life).
Temperature	Shows the temperature of the controller.
General Properties	
Raw Capacity	Shows the original storage capacity.
Media Type	A drive property, either Nytro Flash module or Nytro Serviceable Flash module.
FDE Capable	Indicates whether the drive is capable of encryption. This option is available only if the controller supports security, and if security is configured.
SAS Address	Shows the SAS address for the drive.
Vendor ID	Shows the physical device vendor ID.
Serviceable	Shows if the Serviceable Flash module or Nytro Flash module is serviceable.
State	Shows the drive state (online or offline).
Thermal IO Status	Shows whether the current drive temperature is in a critical, warning, or normal state.
Usable Capacity	Usable storage varies depending on what RAID level you use on an array. If you select drives of varying sizes, the usable space on each drive is restricted to the size of the smallest selected drive
Serial Number	Shows the serial number of the enclosure. Each of the enclosures has a unique serial number.

Property	Description
Negotiated Link Speed	The negotiated link speed for data transfer to and from the drive.
Slot ID	Shows the slot ID of the drive.
Logical Sector Size	Shows the logical sector size of this virtual drive.

3.2.4 Controller Logical View

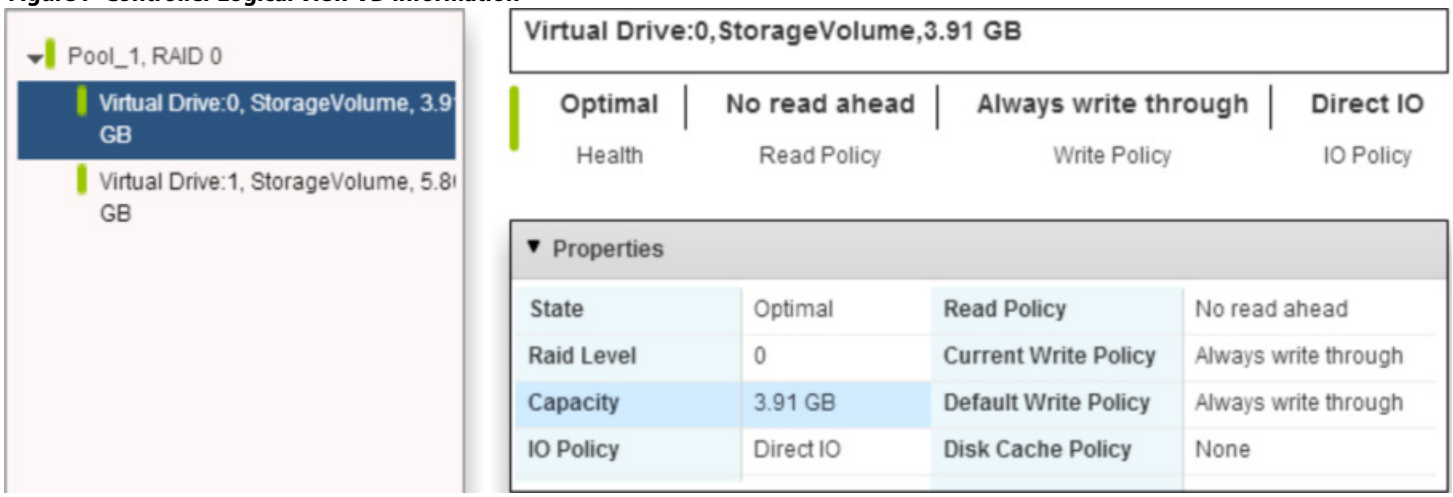
The Logical view shows the hierarchy of controllers, virtual drives, and the drives and drive groups that make up the virtual drives.

Figure 6 Controller Logical View



Property	Description
Health	The drive group health information.
Configured Capacity	The entire drive group capacity.
Remaining Capacity	The remaining capacity in the drive group.
RAID Level	The RAID level of the drive group.
Drive Group Name	The name given to a group of drives that is attached to a RAID controller on which one or more virtual drives can be created.
Contributing Drives	The drives that are part of the drive group.

Figure 7 Controller Logical View VD Information



Property	Description
Health	The virtual drive health information.
Read Policy	Read policy of the virtual drive.
Write Policy	Write policy of the virtual drive.
State	Indicates the status of the drive.
RAID Level	The RAID level of the virtual drive.
Capacity	The amount of storage space on a virtual drive.
I/O Policy	The I/O policy on a specific virtual drive.

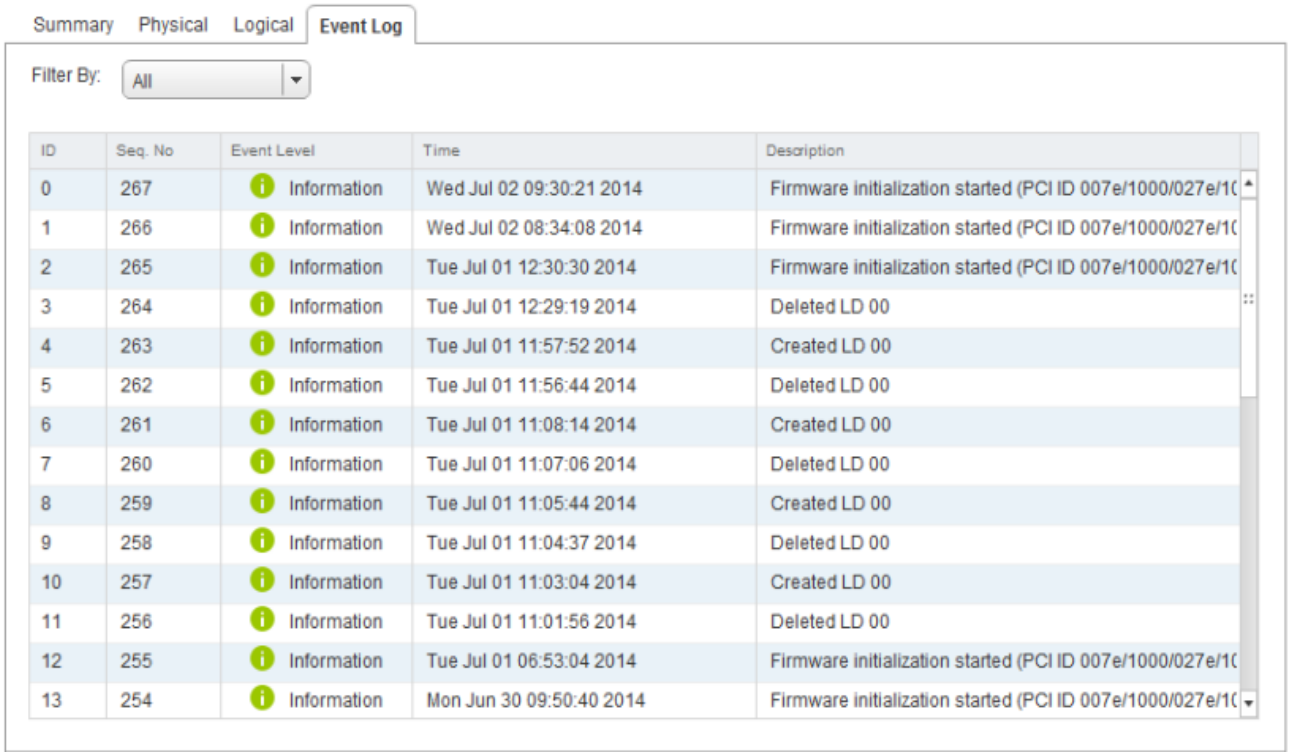
3.2.5 Controller Events Log View

This window shows the firmware event log entries. The new event log entries appear during the session. Each entry has an ID, an error level indicating the severity of the event, the timestamp and date, and a brief description of the event. You can filter the view based on your requirement.

To access the event log entries, perform the following steps:

1. Click the **Event Log** tab.

Figure 8 Controller Event Log


Summary
Physical
Logical
Event Log
Filter By:
All
ID
Seq. No
Event Level
Time
Description
0 267 Information Wed Jul 02 09:30:21 2014 Firmware initialization started (PCI ID 007e/1000/027e/1(
1 266 Information Wed Jul 02 08:34:08 2014 Firmware initialization started (PCI ID 007e/1000/027e/1(
2 265 Information Tue Jul 01 12:30:30 2014 Firmware initialization started (PCI ID 007e/1000/027e/1(
3 264 Information Tue Jul 01 12:29:19 2014 Deleted LD 00
4 263 Information Tue Jul 01 11:57:52 2014 Created LD 00
5 262 Information Tue Jul 01 11:56:44 2014 Deleted LD 00
6 261 Information Tue Jul 01 11:08:14 2014 Created LD 00
7 260 Information Tue Jul 01 11:07:06 2014 Deleted LD 00
8 259 Information Tue Jul 01 11:05:44 2014 Created LD 00
9 258 Information Tue Jul 01 11:04:37 2014 Deleted LD 00
10 257 Information Tue Jul 01 11:03:04 2014 Created LD 00
11 256 Information Tue Jul 01 11:01:56 2014 Deleted LD 00
12 255 Information Tue Jul 01 06:53:04 2014 Firmware initialization started (PCI ID 007e/1000/027e/1(
13 254 Information Mon Jun 30 09:50:40 2014 Firmware initialization started (PCI ID 007e/1000/027e/1(

3.3 Managing the Storage Device

3.3.1 Creating a Virtual Drive

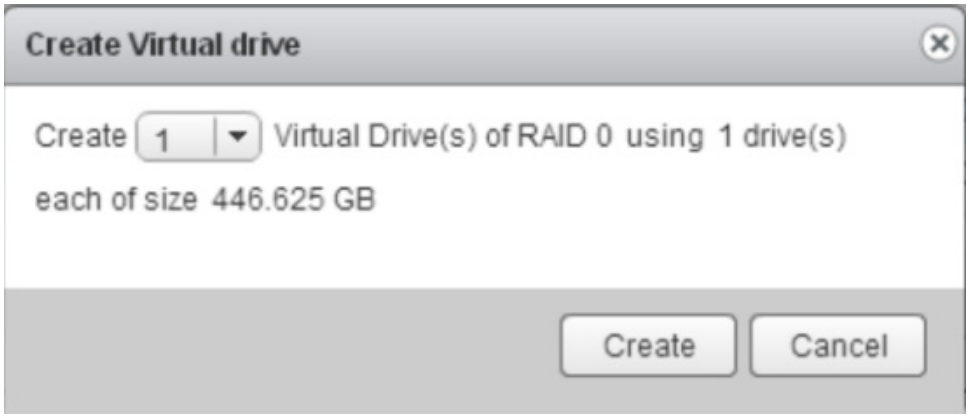
The following steps help you can create a virtual drive (VD).

Figure 9 Create Virtual Drive

1. Select the required controller, and right-click the icon.
2. Select **Create VD**.

The create virtual drive dialog appears.

Figure 10 Create Virtual Drive

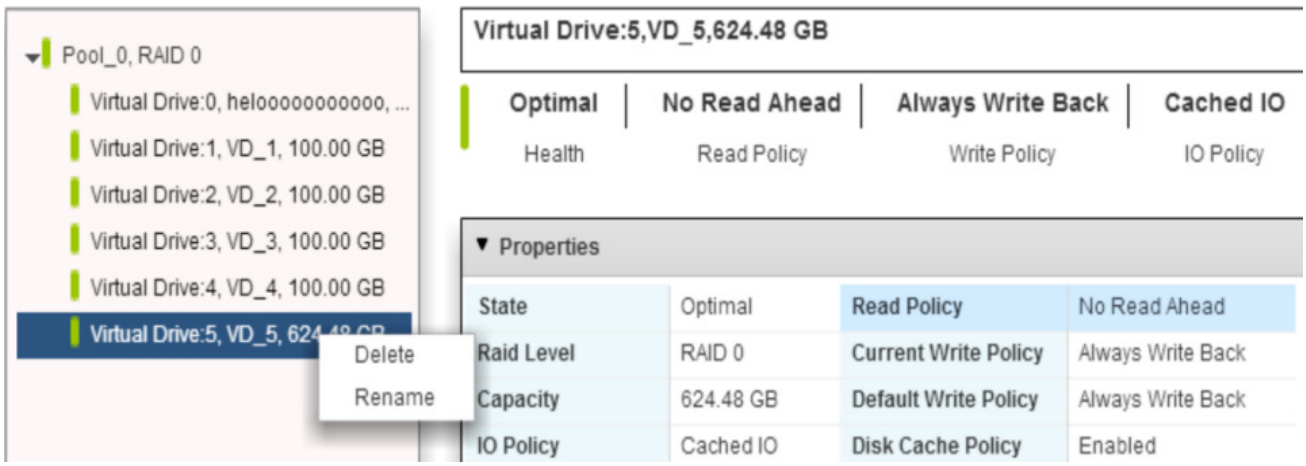


3. From the drop-down list, select the desired number of VDs to create, and click **Create**.

3.3.2 Renaming a Virtual Drive

The following steps help you rename the VD.

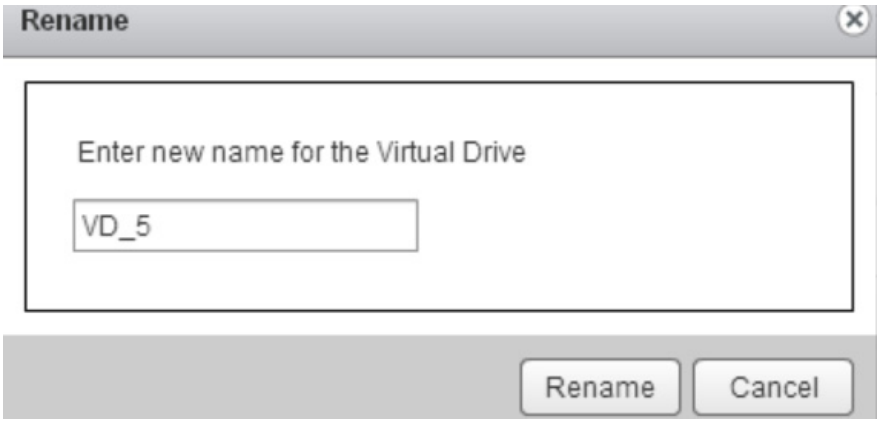
Figure 11 Rename Virtual Drive



1. Expand the drive group, and select the VD that you want to rename.
2. Right-click the VD.
3. Select **Rename**.

The **Rename** dialog appears.

Figure 12 Rename



4. Enter the new VD name, and click **Rename**.

3.3.3 Deleting a Virtual Drive

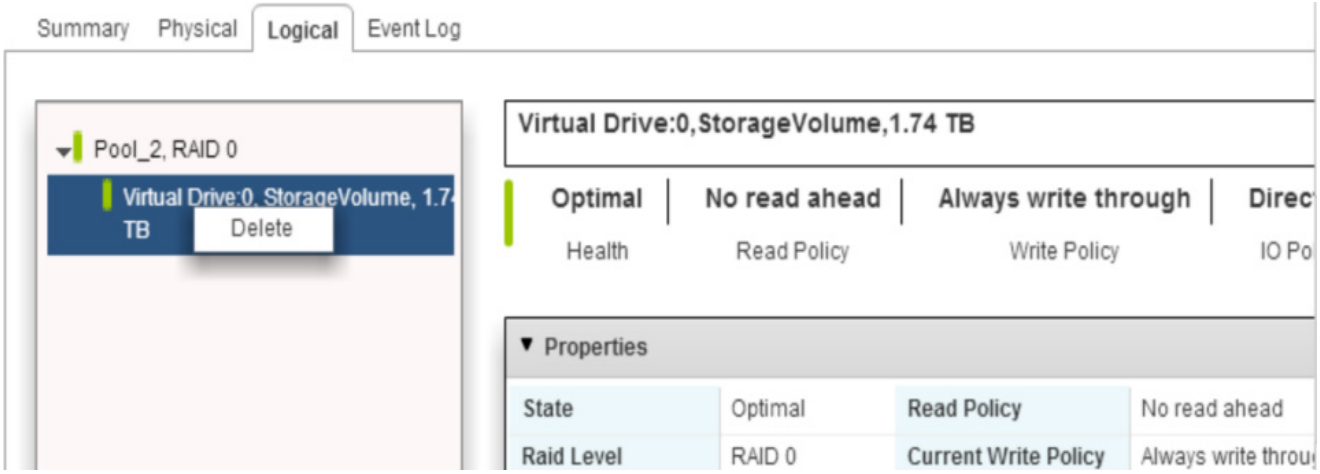
The following steps help you delete a VD.

CAUTION This operation is not recommended. Back up any data that is on the virtual drive that you want to keep before you delete the virtual drive. Make sure that the operating system is not installed on this VD.

You can delete any virtual drive on the controller if you want to reuse that space for a new virtual drive. If multiple virtual drives are defined on a single drive group, you can delete a VD without deleting the whole drive group.

1. Click the **Logical** tab.
2. Expand the drive group, and select the VD that you want to delete.
3. Right-click the VD that you want to delete.
4. Select **Delete** as shown in the following figure.

Figure 13 Delete Virtual Drive



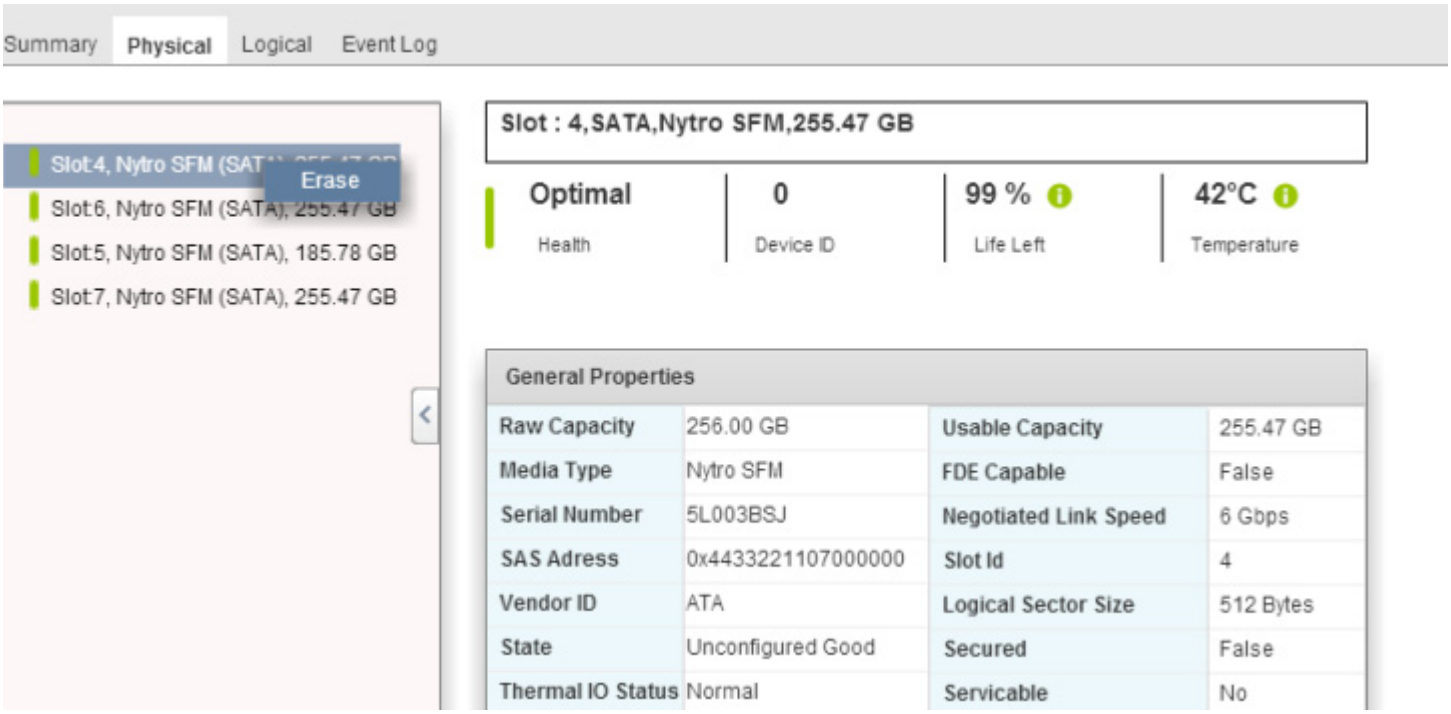
5. When the warning messages appear, click **Yes** to confirm that you want to delete the virtual drive.

NOTE You are asked for a confirmation if you want to delete a VD to avoid accidental deletion of the VD.

3.3.4 Physical Drive Secure Erase

The secure erase operation is supported only on the **Nytro XP7302** controller card.

Figure 14 Secure Erase Physical Drive



1. Right-click the SFM that you want to erase.
2. Select **Erase**.

3.3.5 Clearing the Configuration On the Nytro Controller

The clear configuration operation is supported only on the Nytro WarpDrive controller card (Nytro XP7302).

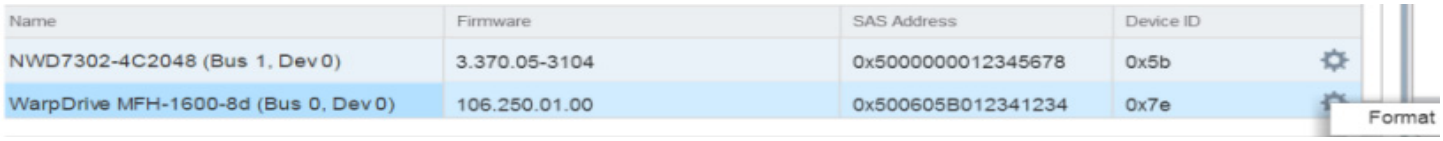
Figure 15 Clear Configuration

1. Select the required controller, and right-click the icon.
2. Select **Clear**.

3.3.6 Formatting the Nytro WarpDrive

The format operation is supported only on the Nytro WarpDrive card.

Figure 16 Format Controller



Chapter 4: Using the Nytro XM Event Monitoring Service Plug-In

This chapter helps you monitor the connected controllers by using the events generated on the controllers. You can view the generated events in a single interface.

4.1 Nytro XM Event Monitoring Service Plug-In Operations

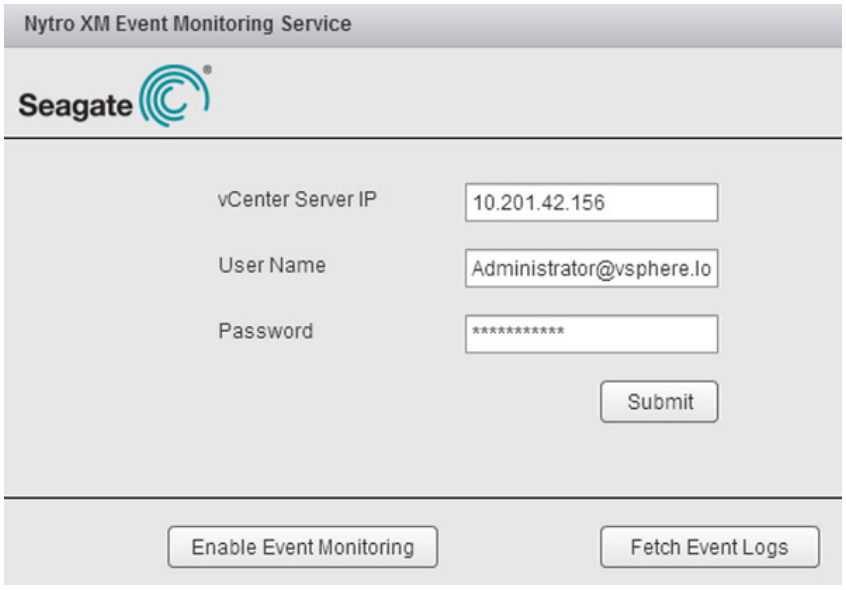
The plug in enables you to perform the following operations:

- View the run-time events in the Event console.
- Fetch and view the event logs (up to a maximum of 32 events per ESXi host).

4.2 Navigating to the Event Console

1. Click the **Nytro XM Event Monitoring Service** icon (marked in blue arrow in Figure 1).
   If you are the first user for the day, the following window appears.

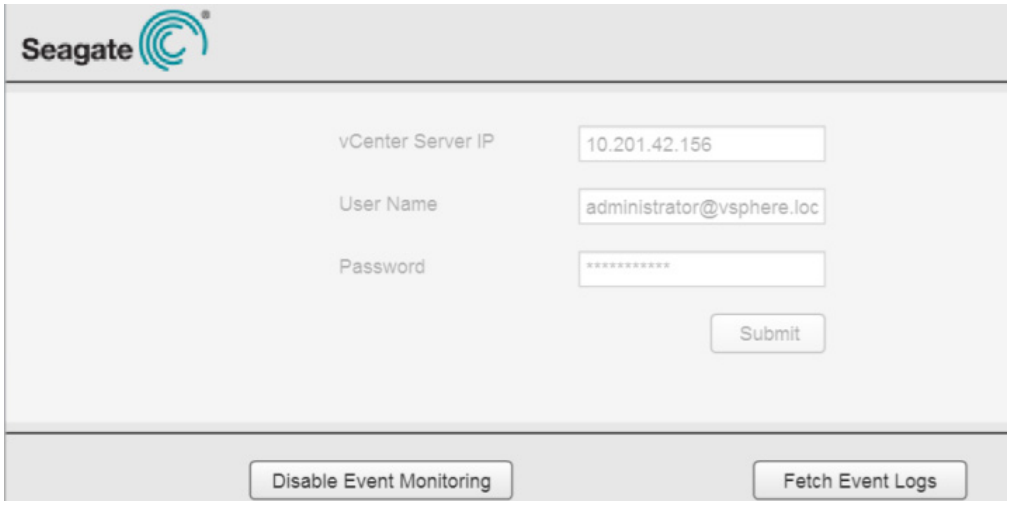
Figure 17 Nytro XM Event Monitoring Service



2. Enter the vCenter server IP, your user name and password that are provided to you, and click **Submit**.
3. Click **Enable Event Monitoring**.

If the Nytro XM EMS plug-in is running, the following window appears.

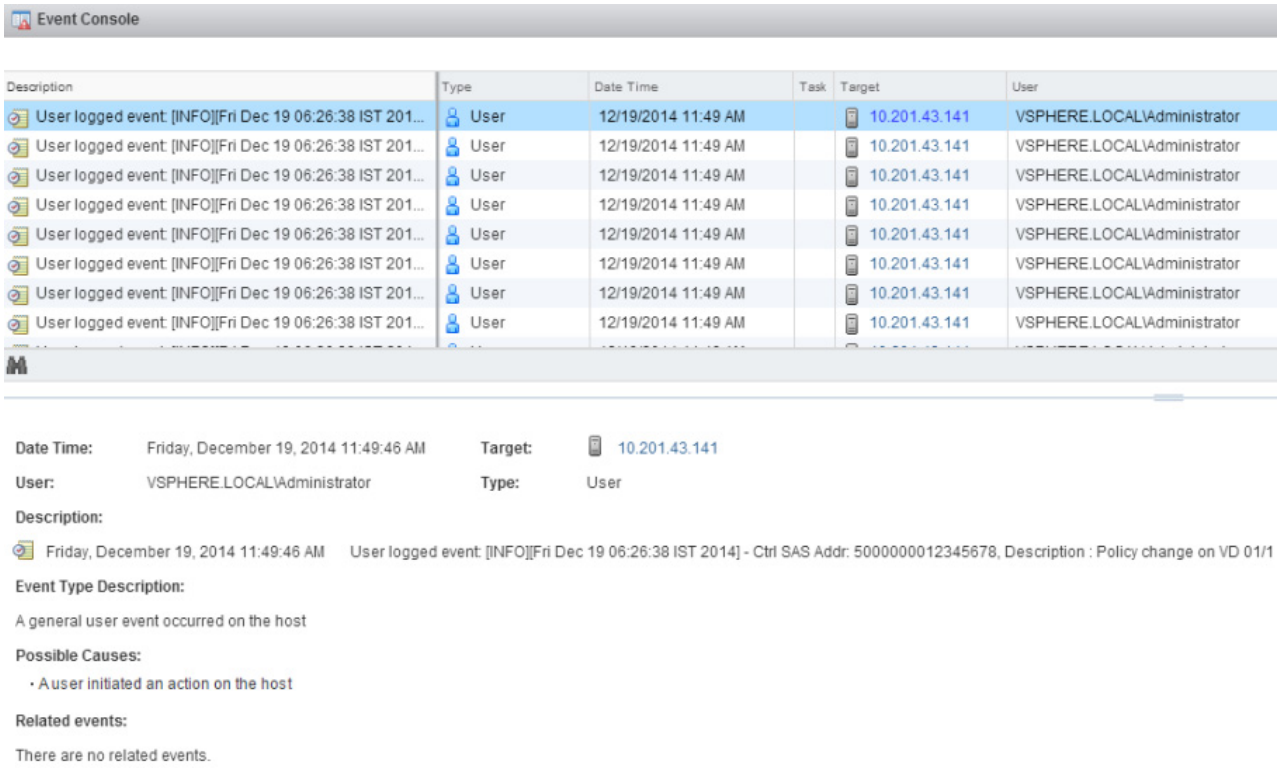
Figure 18 Nytro XM Event Monitoring Service



To navigate to the Event console, perform the following steps:

1. Click the icon on the top of the window.
   The **Home** window as shown in Figure 1 appears.
2. On the **Home** window, lick **Event Console** (see marked in red arrow in Figure 1) or click the Events icon on the left pane of the Nytro XM EMS plug-in window.
   The **Event Console** window appears.

Figure 19 Event Console

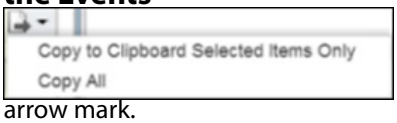

Event Console
Description
Type
Date Time
Task
Target
User
User logged event: [INFO][Fri Dec 19 06:26:38 IST 201...
User
12/19/2014 11:49 AM
10.201.43.141
VSPHERE.LOCAL\Administrator
Date Time: Friday, December 19, 2014 11:49:46 AM
Target: 10.201.43.141
User: VSPHERE.LOCAL\Administrator
Type: User
Description:
Friday, December 19, 2014 11:49:46 AM User logged event: [INFO][Fri Dec 19 06:26:38 IST 2014] - Ctrl SAS Addr: 5000000012345678, Description : Policy change on VD 01/1
Event Type Description:
A general user event occurred on the host
Possible Causes:
• A user initiated an action on the host
Related events:
There are no related events.

3. Highlight and click the event to be viewed as shown in the preceding figure. The detailed information appears in the lower section of the window.

   Click the **Target** hyperlink to navigate directly to the host machine that is responsible for this event. This information helps you take corrective action.

NOTE To view the new events, refresh the **Event Console** by using the refresh ( ) button.

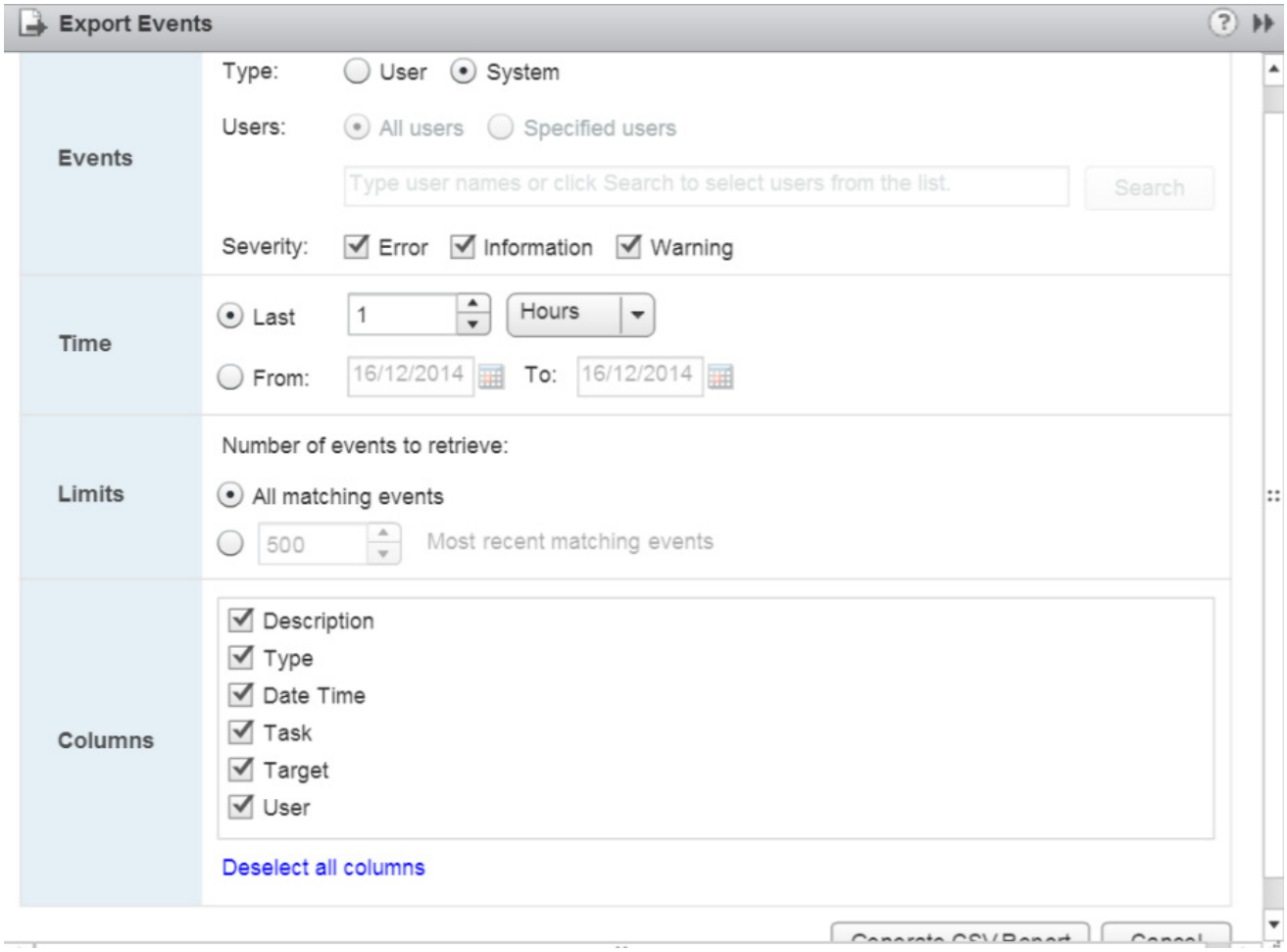
4.2.1 Exporting the Events

1. Click the 

icon to export the events list into the clipboard.
2. Click the arrow mark.

   The **Export Events** dialog appears.

Figure 20 Export Events



3. Select the required columns or fields to be included in the list, and then click **Generate CSV Report**.
   The following table provides the error icons with their description.

ICONS	DESCRIPTION
	Indicates error in the controller.
	Indicates the warning status of any of the components of the controller.
	Indicates that the event type is user.
	Indicates that the event type is information.

Appendix A: Troubleshooting the Nytro XM vCenter Plug-In Issues

A.1 Nytro XM Plug-In Issues

The Nytro XM plug-in uses the logging framework (which is used by vSphere Web Client plug-ins). If there are any issues while retrieving the data, the Nytro XM plug-ins log the debug statements to a log file. These logs can provide useful information to debug the issues, if any.This log file can be identified by the timestamp, *vSphere_client_virgo*. If you face any issues while working with the Nytro XM plug-in, retrieve the log file from its location, and contact Seagate Technical Support for further assistance at http://www.seagate.com/about/contact-us/technical-support/

- You can find the `Log` file in the following locations based on the platform used:
  - On Windows: `<OS_DISK>:\ProgramData\VMware\vSphere Web Client\serviceability\logs`
  - On Linux: `/var/log/vmware/vsphere-client/`

A.2 Nytro XM Event Monitoring Service Plug-In Issues

- I am unable to view the events in my event console.

  This could be because of one of the following reasons:
  - You might not have copied the Nytro XM EMS plug-in package.
  - You might not have correctly installed the Nytro XM EMS plug-in.
  - You might not have enabled Event Monitoring.

Perform the following steps to enable Event Monitoring.

1. Go to `Home icon >Administration > Client Plug-Ins`.
2. Check if the Nytro XM plug-in is enabled. If it is not enabled, go back to the home screen, click the **Nytro XM Event Monitoring Service** icon.
3. Log on with your vCenter credentials, and remember to click **Enable Event Monitoring**.

Glossary

This appendix provides a glossary for terms used in this document.

C	
Controller	A chip that controls the transfer of data between the microprocessor and memory or between the microprocessor and a peripheral device such as a drive. RAID controllers perform RAID functions such as striping and mirroring to provide data protection.
D	
Device ID	A controller or drive property indicating the manufacturer-assigned device ID.
Drive group	A group of drives attached to a RAID controller on which one or more virtual drives can be created. All virtual drives in the drive group use all of the drives in the drive group.
Drive state	A drive property indicating the status of the drive.
G	
GUI	Graphical User Interface
P	
Product name	A controller property indicating the manufacturing name of the controller.
V	
VC	vCenter
Virtual drive	A storage unit created by a controller chip from one or more drives. Although a virtual drive (logical drive) can be created from several drives, it is seen by the operating system as a single drive. Depending on the RAID level used, the virtual drive can retain redundant data in case of a drive failure.
W	
WD	Seagate SSD Module, a PCI device: WarpDrive.

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